

Art Unit: 2672

1. A facsimile signal transmission system, in which the transmission side and the reception side are inter-coupled via a bearer for bilateral facsimile signal transmission, each side being constituted by DCME comprising:

a transmission side including a signal identification means for identifying the input signal and outputting a FAX data identification signal, a FAX data allotment control means for outputting allotment control data for a FAX data demodulation process according to the FAX data identification signal, a FAX data demodulation processing means for demodulating and rearranging the input signal according to the allotment control data and outputting a FAX data transmission signal, a FAX allotment data generation means for generating a FAX data allotment signal for notifying the allotment control data to the opposite side of communication, and a multiplexing means for multiplying the FAX data transmission signal and the FAX data allotment signal and outputting the resultant signal as a bearer signal; and

a reception side including a separation means for separating the FAX data transmission signal and the FAX data allotment signal from the bearer input and outputting the separated signals, a FAX data allotment signal reception means for outputting a FAX data allotment analysis signal from the FAX data allotment signal, a FAX data distribution control means for outputting

distribution control data for remodulation of FAX data, a FAX data remodulation processing means for remodulating the FAX data transmission signal according to the distribution control data and outputting a FAX data remodulation signal, a signal output means for outputting the FAX remodulation signal as trunk signal; wherein:

the transmission side is provided with a control terminal for inputting signal identification data, and the input signal identification content in the signal identification means is capable of being changed according to the signal identification data.

2. A facsimile signal transmission system, in which the transmission side and the reception side are inter-coupled via a bearer for bilateral facsimile signal transmission, each side being constituted by DCME comprising:

a transmission side including a signal identification means for identifying the input signal and outputting a FAX data identification signal, a FAX data allotment control means for outputting allotment control data for a FAX data demodulation process according to the FAX data identification signal, a FAX data demodulation processing means for demodulating and rearranging the input signal according to the allotment control data and outputting a FAX data transmission signal, a FAX allotment data generation means for generating a FAX data allotment signal for notifying the allotment control data to the

Art Unit: 2672

opposite side of communication, and a multiplexing means for multiplying the FAX data transmission signal and the FAX data allotment signal and outputting the resultant signal as a bearer signal; and

a reception side including a separation means for separating the FAX data transmission signal and the FAX data allotment signal from the bearer input and outputting the separated signals, a FAX data allotment signal reception means for outputting a FAX data allotment analysis signal from the FAX data allotment signal, a FAX data distribution control means for outputting distribution control data for remodulation of FAX data, a FAX data remodulation processing means for remodulating the FAX data transmission signal according to the distribution control data and outputting a FAX data remodulation signal, a signal output means for outputting the FAX remodulation signal as trunk signal; wherein:

the transmission side is provided with a control terminal for inputting a FAX data demodulation control data, the demodulation control content outputted from the FAX data allotment control means to the FAX data demodulation processing means is changed according to the FAX data demodulation control signal, and the FAX data remodulation processing means in the reception side can execute a remodulation process corresponding to the changed demodulation content according to the FAX allotment signal from the FAX data allotment signal generation means.

3. (Amended) The facsimile signal transmission system according to claim 1, wherein the FAX data demodulation processing means includes a delay means for delaying the input signal for a time necessary for the signal identification in the signal identification means according to the allotment control data, a FAX data demodulation means for demodulating the FAX data signal with a pertinent demodulation circuit selected according to the allotment control data and outputting a FAX data demodulation signal, and a FAX data transmission means for rearranging the FAX data demodulation signal according to the allotment control data and outputting the FAX transmission signal.

4. (Amended) The facsimile signal transmission system according to claim 1, wherein the FAX data remodulation processing means includes a FAX data transmission means for rearranging the FAX data transmission signal according to the distribution control data and outputting the FAX demodulation signal, and a FAX data remodulation means for remodulating the FAX data demodulation signal according to the distribution control data.

5. (Amended) The facsimile signal transmission system according to claim 1, wherein the voice/data allotment data and the FAX data allotment data are transmitted mutually between the FAX data allotment control means and the voice/data allotment control means for outputting allotment control data corresponding to the voice/data signal.

6. (Amended) The facsimile signal transmission system according to claim 1, wherein the FAX data control signal is branched from the FAX data allotment signal reception means in the reception side and transmitted via the signal identification means in the transmission side to the FAX data allotment control means to let the FAX data allotment control means output the allotment control data according to the FAX data identification signal and the FAX data control signal.

Art Unit: 2672

7. A facsimile signal transmission system in the digital circuit multiplication equipment in which an input signal is identified to be FAX data by a signal identification means wherein a control terminal for inputting signal identification data is provided on a transmitting side and the input signal identification content in the signal identification means is capable of being changed according to the signal identification data.

8. A facsimile signal transmission system in the digital circuit multiplication equipment in which an input signal is identified to be FAX data by a signal identification means wherein a control terminal for

inputting a FAX data demodulation control data is provided on a transmitting side, the FAX data demodulation is controlled according to the FAX data demodulation control signal, and a remodulation process corresponding to the controlled demodulation is executed according to received FAX data allotment signal.

Art Unit: 2672

9. (New) The facsimile signal transmission system according to claim 2, wherein the FAX data demodulation processing means includes a delay means for delaying the input signal for a time necessary for the signal identification in the signal identification means according to the allotment control data, a FAX data demodulation means for demodulating the FAX data signal with a pertinent demodulation circuit selected according to the allotment control data and outputting a FAX data demodulation signal, and a FAX data transmission means for rearranging the FAX data demodulation signal according to the allotment control data and outputting the FAX transmission signal.

10. (New) The facsimile signal transmission system according to claim 2, wherein the FAX data remodulation processing means includes a FAX data transmission means for rearranging the FAX data transmission signal according to the distribution control data and outputting the FAX demodulation signal, and a FAX data remodulation means for remodulating the FAX data demodulation signal according to the distribution control data.

11. (New) The facsimile signal transmission system according to claim 2, wherein the voice/data allotment data and the FAX data allotment data are transmitted mutually between the FAX data allotment control means and the voice/data allotment control means for outputting allotment control data corresponding to the voice/data signal.

12. (New) The facsimile signal transmission system according to claim 2, wherein the FAX data control signal is branched from the FAX data allotment signal reception means in the reception side and transmitted via the signal identification means in the transmission side to the FAX data allotment control means to let the FAX data allotment control means output the allotment control data according to the FAX data identification signal and the FAX data control signal.